example, the resistance encountered by a body of definite shape when moving in air or water; and the distribution of pressure over the surface of the body when moving in air (wind-tunnel experiments).

The theme of the present work is that a body, immersed in and in relative motion with a fluid, will assume as nearly as possible a shape such that contour lines are stream-lines. Observations on a mercury drop are given to substantiate this theme. Illustrations are also gathered from many realms of science—geology, biology, physics, meteorology.

In biology the importance of the adjustment of shape to stream-line contours seems sufficiently great to be designated by a term (rheotropism), for this phenomenon is parallel to others where the organism adjusts itself to a field of directed stimulus, as geotropism, heliotropism, and galvanotropism.

COMMENTS ON THE THEORY AND PRESENT STATUS OF FLICKER PHOTOMETRY.

By A. H. Taylor.

[ABSTRACT.]

THE flicker photometer has been used to some extent in heterochromatic photometry, to avoid the difficulties usually encountered in photometering lights differing greatly in color. However, its more general adoption has probably been retarded by a lack of understanding of its theory, and by practical difficulties encountered in its operation. This paper gives a simple treatment of the theory from a new point of view, and gives references to published data bearing upon it. It also points out some requirements for satisfactory operation of such photometers. Full details will soon be available in the *Transactions of the Illuminating Engineering Society*.

PAINTS FOR INTEGRATING SPHERES.

By A. H. Taylor.

[ABSTRACT.]

MANY photometric integrating spheres for measurement of light flux are in use in this country, but considerable difficulty